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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/458,319	12/10/1999	AIDAN JAMES SMYTH	DIVA-043	8719

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EXAMINER

RAMAN, USHA

ART UNIT PAPER NUMBER

2623

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/458,319

Applicant(s)

SMYTH ET AL.

Examiner

Usha Raman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 26th, 2006 has been entered.

Drawings

2. The drawings are objected to because in figure 2, the Y and N branches at step 210 need to be reversed for compliance with the disclosure in page 11, lines 21-24. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR

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1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Response to Arguments

3. Applicant's arguments filed July 26th, 2006 have been fully considered but they are not persuasive.

Applicant's arguments stating that Day does not teach the plurality of play lists, wherein each playlist is associated with a subscriber has been noted. However, Day shows the step of maintaining multiple streams to multiple clients, and thereby comprising multiple playlist, each playlist for each clients being streamed to. See column 3, lines 30-31, lines 43-47, and lines 55-58. Examiner further notes that a playlist is a queue of media content to be played, and therefore a play queue. As a result, the examiner maintains rejection.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 8-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claim 8 recites the limitation, "a play queue comprising a plurality of playlists, wherein each playlist is associated with a respective subscriber" and independent claim 16 recites the limitation, "maintaining a play

queue at said provider equipment comprising a plurality of playlists, wherein each playlist is associated with a respective subscriber". The disclosure, in page 10, lines 8-11, discloses that, " a *single* playlist or play queue 111 is utilized for one subscriber" and subsequently concludes that "the playlist or play queue 111 actually comprises a plurality of playlists where each of the plurality of playlist is associated with a respective subscriber". Furthermore, in the disclosure (page 10, lines 6-8) applicant defines a playlist or a play queue as reference item 111, thereby equating play queue to playlist. In light of the specification, which attempts to define the playlist or play queue as comprising plurality of instances of itself, and further equate a playlist to a play queue, the claimed limitation is rendered indefinite. As best understood, the claim language is read as "a plurality of playlists, each play list associated with a respective subscriber".

Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Day et al. (US Pat. 5,996,015) in view of DeMoney (US Pat. 6,065,050), and Katinsky et al. (US Pat. 6,452,609).

In regards to claims 8 and 16, Day discloses an information distribution system including provider equipment (201) and subscriber equipment (203),

wherein provider equipment communicates to said subscriber equipment information streams including content requested by said subscriber equipment (see column 3, lines 10-20 and lines 43-46), comprising:

a session manager, for interacting with said subscriber equipment and maintaining a plurality of playlists (multiple data pumps service a plurality of clients by streaming data to a plurality of clients, therefore multiple playlists are generated for each of plurality clients, see column 3, lines 30-31, lines 43-47, and lines 55-58) wherein each playlist (i.e. provides stream control functions for controlling the playback of media. See column 3, lines 58-61, column 4 lines 1-2 and column 5, lines 43-45) is associated with a respective subscriber, said playlist defining at least one content stream to be provided to (see column 6, lines 28-29). The session manager further inherently "stores" (by caching) the generated playlist at the server while the session is alive, in order to access the playlist for playback of next media clip.

a server for storing content streams (data pump 111 stores multimedia assets. See column 3, lines 43-45); and

a server controller for retrieving from said server, content streams defined by said playlist, said content streams being sequentially provided to said subscriber equipment (see column 5, lines 45-54, column 6, lines 40-50);

Day also discloses that during the playback of clips from a playlist the system determines if additional clips in the playlist are present, and in the event there are additional clips, it retrieves the additional clips and concatenates it to the

current clip so that the clip maybe played seamlessly. See Day: column 6, lines 36-64. Furthermore, while the session is active, the system checks for additional clips in the playlist, to determine if additional data needs to be retrieved. Therefore, the system also comprises the step of "continuously accessing playlist" while the session is active, in order to determine when the next clip needs to be retrieved in order to be streamed to the user.

While Day teaches controlling the playback of a content stream using VCR style functions (see column 5, lines 43-45), the system lacks the step of associating a fast forward and reverse stream with the content streams or modifying the play list in response to play list modification commands from a subscriber equipment.

DeMoney teaches maintaining normal play stream with a look up table for associating the trick play stream (such as fast forward and fast reverse streams) with the content stream. When a user changes the playback rates (i.e. change of attribute) of the content stream using VCR type functions, the media server switches the respective trick play stream associated with the command, based on the offset from the look up table. Note column 4, lines 59-67 and column 5, lines 1-60 of DeMoney. DeMoney further discloses that switching of streams occurs only at well-defined "random-access" points (i.e. splicing points). Note column 5, lines 47-52. The index table contains the offset points that mark the entry and exit points. When a content stream is switched, the media server looks for an offset in the next content stream (i.e. an entry point in the next content stream) that is just

beyond the current output offset (i.e. exit point of the current content stream). Note column 10, lines 31-53.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Day in view of DeMoney's teachings by maintaining a look up table associating trick play streams with the content streams as an "additional information" relating to the content stream (see column 4, lines 8-22 in Day) for providing trick play functionality by indexing, in order to reduce processing requirement of the video server. The modified system further contains plurality of splicing points for each content stream, defined by the offsets in the index table, where the next content stream is spliced at an entry point (next offset) associated with an exit point (current offset) of a current stream.

The modified system of Day in view of DeMoney lacks modifying the play list in response to play list modification commands sent from subscriber equipment.

Katinsky teaches a user-friendly media player interface that initiates and manages a session with content provider (i.e. "session manager") by creating and maintaining a sequencer (play list) with content streams to be played at the subscriber equipment, where the media player further allows the user to modify the play list. Note column 3, lines 43-54 and column 4, lines 10-20 of Katinsky. Using the media player interface, the subscriber can modify the play list by adding or deleting content streams as well as skip forward and backward to a content stream to be played. Note column 6, lines 19-26 and column 2, lines 55-57 in Katinsky.

It would have been obvious to further modify the system of Day in view of DeMoney with Katinsky's teachings by providing a play-list modification capabilities of Katinsky in order to allow the user to dynamically modify or change the sequence of media content streams to be played.

In further regards to claim 16, Day further discloses that the playlist is generated at the provider equipment. See column 6, lines 14-30 in Day. Furthermore, the session manager of the modified system controls the media session in response to all the user commands, including playlist modification commands.

In regards to claims 9 and 17, the modified system provides modification commands such as fast forward, fast reverse as well as skip forward and skip backwards commands (see column 6, lines 19-26 in Katinsky).

In regards to claims 10 and 18, the modified system provides a session manager with "add" and "delete" functionalities that allow media objects to be added or removed from the play list. Note column 2, lines 55-57.

In regards to claim 11, the modified system provides a session manager with skip forward and skip backward functionalities to skip to next or previous clip in the play-list. Note figure 7, reference numbers (106) and (107) and description in column 6, lines 19-26 of Katinsky.

In regards to claims 12 and 19, the modified system provides a session manager with trick play functionalities that allow a fast reverse and fast forwards

stream to be associated with the content stream in response to fast forward and fast reverse commands. Note column 5, lines 25-60 of DeMoney.

In regards to claims 13 and 20, Day discloses that at a predetermined point (threshold level) prior to the end of the current data stream, an initialization process begins for the next video segment on the play list, to prepare the next data stream to be seamlessly concatenated to the end of the current data stream. Note column 6, lines 31-64 of Day. Therefore the modified system of Day in view of DeMoney and Katinsky has "termination notification" means that is communicated to the server when the current data stream reaches the predetermined point (the threshold level).

In regards to claims 14 and 21, upon reaching the predetermined point prior to the end of the current data stream, the session manager indicates to the server controller the next content stream to be provided to the subscriber equipment.

In regards to claim 15, the multimedia files in the modified system are striped across disks of a plurality of storage servers. Note column 3, lines 15-20, lines 39-67, and column 4, lines 23-30 of Day. The data pump acts as the "transport processor", where under the control of the server controller, delivers the media assets to the subscriber equipment.

Conclusion


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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